



OryzActive & OryzaCare

Active oils and natural exfoliants from rice bran for
cosmetic applications
Patented supercritical CO₂ process
Single INCI



RB PROCESS

Making full use of rice bran through a patented, solvent-free process, for cosmetic ingredients backed by independent studies.

Creating value by supporting the shift from petrochemistry to sustainable chemistry through innovative processes and products.

2018

FOUNDED

Switzerland, France, Spain

7 years

R&D

20+ pilot trials
5 industrial production runs

3

**PATENT AND
APPLICATIONS**

1 granted EU/US/JP
2 applications filed

2

RANGES

OryzActive (oils)
OryzCare (exfoliant)

Three entities, one shared vision

SWITZERLAND



RB Process SA

Geneva

Holding; ownership and licensing of IP rights

SPAIN



RB Active SL

Valencia (Albufera)

Production; sales; regulatory affairs

FRANCE



RB Process France SAS

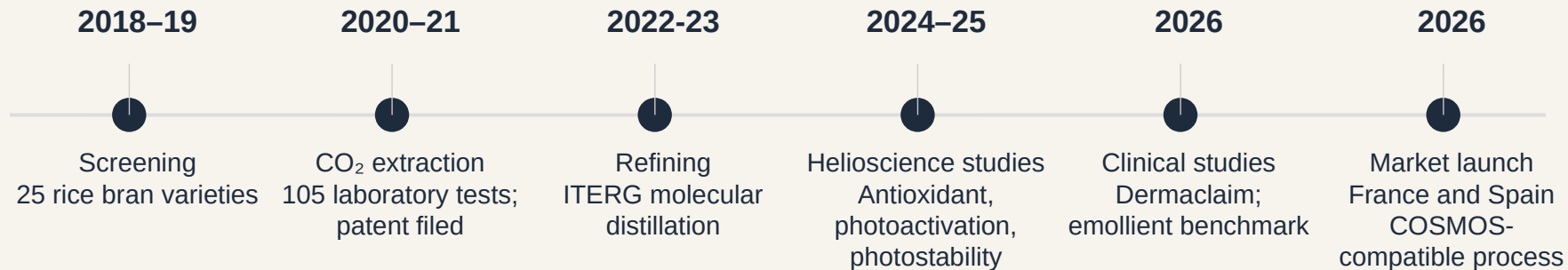
Marseille

R&D and regulatory affairs; service provider to RB Active SL

Michel Bonnefous, Juan Lis, Jérôme Abrahmi

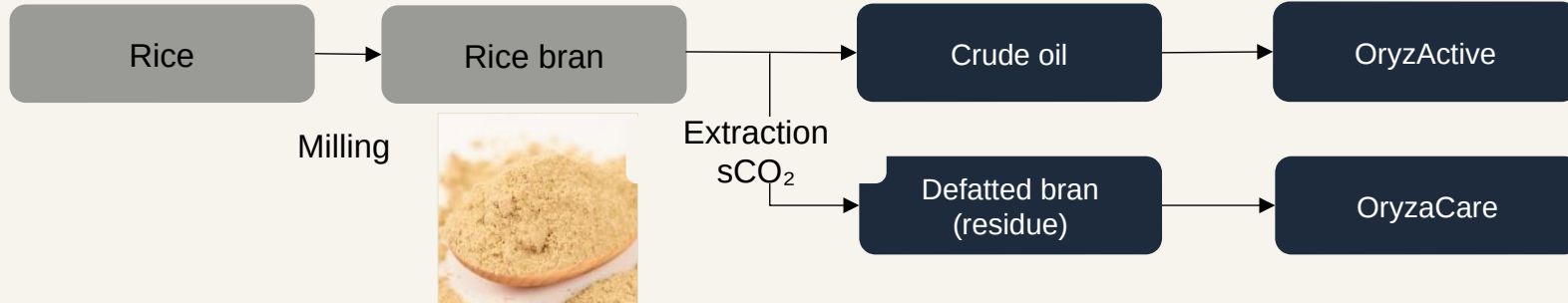
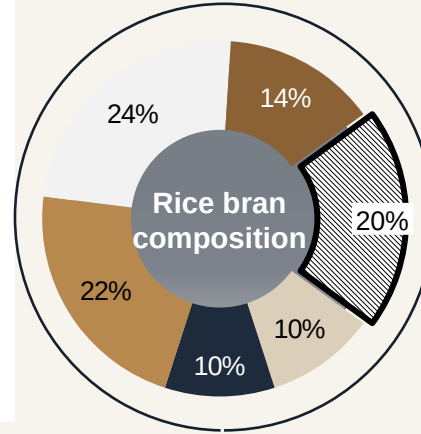
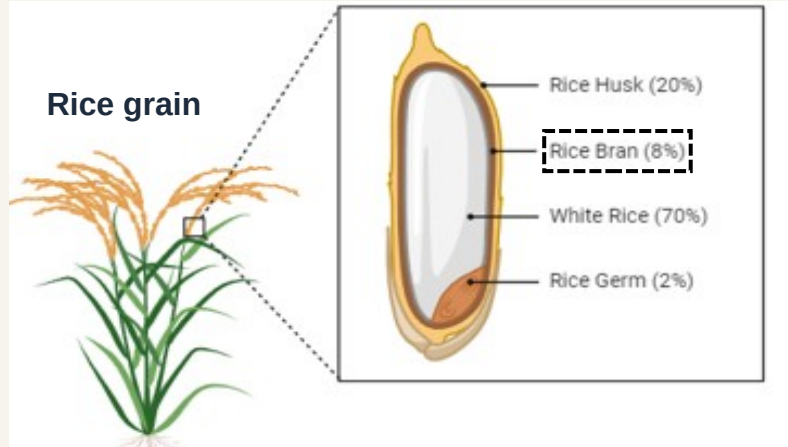
Shareholders

7 years of R&D; from raw material to market



Patent EP3766950 granted EU / US / JP | Application A24499EP filed Dec. 2025 | Application A24494EP filed

From rice to cosmetic ingredients



Industrial equipment

WHITE RICE MILL
RICE BRAN SUPPLIER



INDUSTRIAL SUPERCRITICAL
CO₂ EXTRACTION UNIT



INDUSTRIAL MOLECULAR
DISTILLATION UNIT FOR OIL
REFINING



Supercritical CO₂ extraction

Patent EP3766950; granted EU / US / JP

Solvent-free

No hexane or petrochemical solvent residue. Process compatible with the COSMOS standard.

Selectivity

Supercritical state (31.1 °C; 73.8 bar): the solvent power of a liquid with the diffusivity of a gas. Gamma-oryzanol is fully preserved.

Closed loop

CO₂ is recovered and recycled continuously. Lower carbon footprint than conventional extraction.

Consistent quality

105 laboratory tests and more than 20 pilot trials.
Industrialised, controlled and reproducible process.



OryzActive range

INCI: *Oryza Sativa Bran Oil* | Single INCI; three performance levels

OryzActive Base

Free use level

Plant-based emollient; substitute for mineral oils and silicones

Process compatible with the COSMOS standard

OryzActive Shield

3–5 % in formulation

Antioxidant and photostable after irradiation from 1 % (Helioscience)

Photoactivation at higher use levels, from 10 % (patent application A24499EP)

OryzActive Intense

2–3 % in formulation

Same profile as Shield; lower activation thresholds

Photoactivation from 5 %; active efficiency for premium formulations

One INCI for all three grades; single sourcing; simplified regulatory declaration.



OryzActive: properties and effects

10+ independent studies; Helioscience

Skin antioxidant

Photostable and antioxidant after irradiation from 1 %. Superior to Bioxan E1000 (0.3 %): Shield 5 %, Intense 3 %.

Formulation stabilisation

Superior to Bioxan SF T50 (0.3 %): Shield 5 %, Intense 3 % (Helioscience 2605-AOX00131).

Photoactivation (patent application A24499EP)

At higher use levels: Shield from 10 %, Intense from 5 %. Activity enhanced under irradiation.

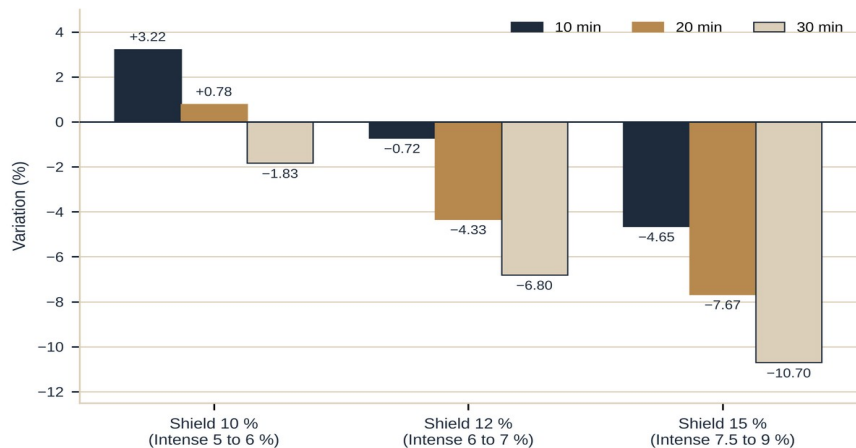
Emollient benchmark

Photostable at all irradiation times, unlike the three reference emollients tested.

OryzActive Base

Neat oil photostable and photoactivatable (2606-AOX00091). In emulsion, antioxidant after irradiation from 1 % (2512-AOX00011); at 5 %, antioxidant before and after irradiation, photostable, superior to Bioxan E1000 and SF T50 at 0.3 % (2605-AOX00131).

Photoactivation by dosage (Helioscience)



Negative value = photoactivation (activity enhanced under irradiation)

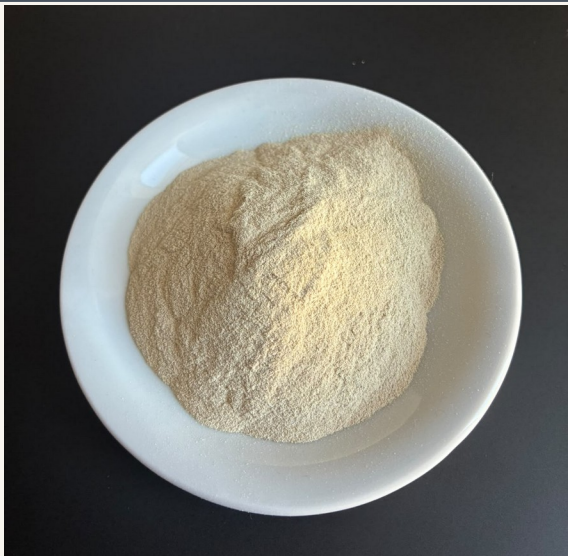
Source: Helioscience 2512-AOX00091; use levels expressed as Shield and Intense equivalents

Shield, Intense: 1 % →
antioxidant and photostable

Shield 10 % / Intense 5 % →
photoactivation

OryzaCare Oryza Sativa Bran two grades, one raw material

ORYZACARE GLOW



< 200 μm

Daily use; face; sensitive skin

Rinse-off gel; mask; exfoliating cream

ORYZACARE INTENSE



> 200 μm

Weekly treatments; body and face

Body scrub; body polish; exfoliating soap

OryzaCare Glow | C-Cube 3 CR; Corneofix CF 20; tape-stripping

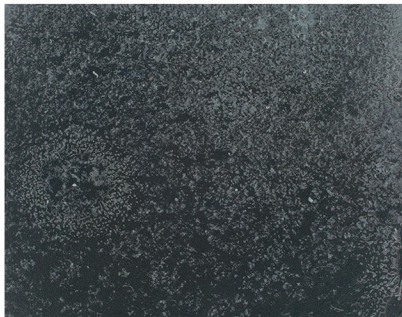
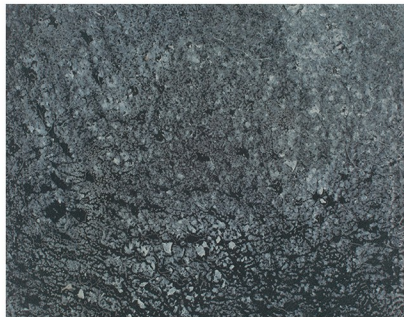
Volunteer 01



Volunteer 07



Volunteer 11

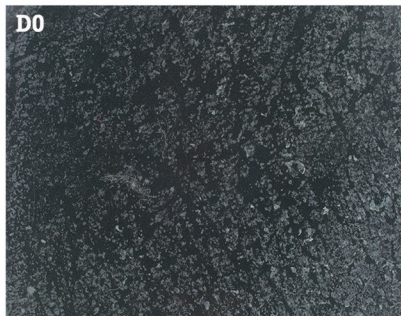


Significant

DESQUAMATION D14 vs D0

OryzaCare Intense | C-Cube 3 CR; Corneofix CF 20; tape-stripping

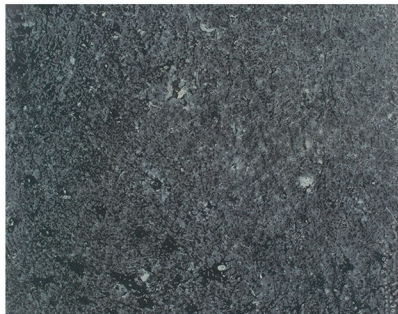
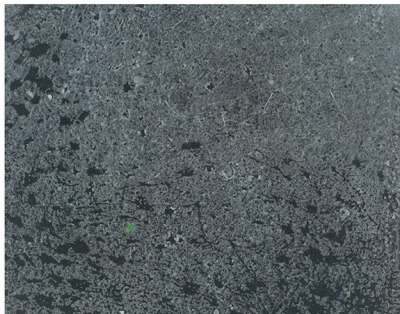
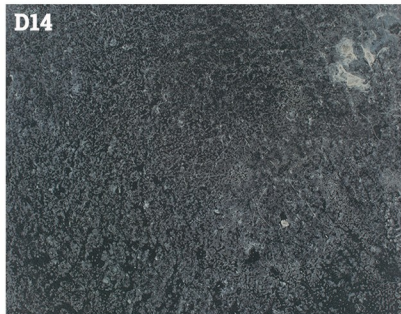
Volunteer 15



Volunteer 16



Volunteer 21



Significant

DESQUAMATION D14 vs D0

Circular economy: zero waste, zero solvent



01 Rice bran



Rice bran is used as a raw material in **short supply chains**, as it is produced and traded within the EU.



Zero waste

100 % of the bran converted into finished cosmetic ingredients. No solid waste.

03 Residue

The final residues of this process are upgraded into **cosmetic exfoliants**

OryzaCare



Cosmetic ingredients

Rice bran is stabilised and processed using a **solvent-free extraction technology**, which yields the different oils used in several natural cosmetic ingredients

OryzActive

Zero solvent

Supercritical CO₂ process only. No hexane or petrochemical solvent residue.

COSMOS-compatible

Process compatible with the COSMOS standard.

Intellectual property and clinical evidence

Reference	Status	Subject	Coverage
EP3766950	Granted	Supercritical CO ₂ extraction process for rice bran	EU / US / JP
A24499EP	Application filed	Photoactive properties and photoactivation	European filing, under examination
A24494EP	Application filed	Defatted rice bran exfoliant	European filing, under examination

CLINICAL AND INSTRUMENTAL EVIDENCE

10+

Helioscience studies

In vitro studies
Antioxidant
photoactivation, photostability

2

Dermaclaim clinical studies

OryzaCare; 22 and 20 volunteers; D0,
D14
**Desquamation; hydration and cell
regeneration**

2

patch test studies

10 volunteers per grade; 50 % sensitive
skin

The right time

Three market trends that directly favour OryzActive and OryzaCare

01

The end of microplastics

The EU restriction on intentionally added microplastics creates urgent demand for natural, biodegradable and documented exfoliants. OryzaCare meets this specification: rice bran with no chemical modification, clinically tested in a rinse-off gel at 5 %, with a patent application filed.

OryzaCare Glow & Intense

02

Replacing mineral oils and silicones

Formulators are looking for a solvent-free, plant-based oil phase to replace mineral oils and silicones without an extra INCI line. OryzActive Base is a formulation oil with a free use level; Shield and Intense add antioxidant activity in the same phase, under a single INCI.

OryzActive Base + Shield/Intense

03

Documented antioxidant actives

Combining antioxidant activity, photoactivation and photostability in a single raw material is documented by 10+ independent studies.

OryzActive Shield & Intense



www.rbprocess.com

One patented process. Two ranges. A fully circular loop.

Jérôme Abrahmi

CEO

RB Process SA | RB Active SL | RB Process France SAS